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EXAMINER

SHOSHO, CALLIE E

ART UNIT PAPER NUMBER

1714

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/751,164

Applicant(s)

DANDREAUX ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/10/04 & 4/11/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claims 5, 9, 16, and 18 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 5, which depends on claim 1, recites that the rosin-based resin is “about 0 wt% to about 40 wt.%” while claim 1 recites that the composition comprises rosin-based resin. Thus, claim 5, fails to further limit the scope of the claim on which it depends, namely, claim 1, given that the rosin-based resin is optional in claim 5 but required in claim 1. That is, claim 5 is broader than claim 1 given that while claim 1 requires the use of rosin-based resin such rosin-based resin is not required in claim 5 in light of the disclosure in claim 5 that the rosin-based resin is present in amount of 0 wt.%.

Similar objections are made with respect to claims 9, 16, and 18 which each depend on claim 1 and which the use of 0 wt.% alcohol solvent, 0 wt.% plasticizer, and 0 wt.% latex emulsion, respectively, while claim 1 requires the presence of alcohol solvent, plasticizer, and latex emulsion.

2. Claims 5-7, 9, 14, 16, and 18 objected to because of the following informalities:

Words appear to be missing in each of claim 5-7, 9, 14, 16, and 18 regarding what the wt.% of each claim refers to. It is suggested in claim 5, for instance, after “rosin-based resin”, the

phrase “is present in an amount of” is inserted or after 40 wt.%, the phrase “of the composition” is inserted. Similar suggestion is made in claims 6-7, 14, 16, and 18.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 3, 5, 9, and 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(a) Claim 3 recites an improper Markush group. In line 3, after “hydrocarbon-”, it is suggested that “and/or” is deleted and “and” is inserted.

(b) Claim 5, which depends on claim 1, recites that the rosin-based resin is “about 0 wt% to about 40 wt.%” while claim 1 recites that the composition comprises rosin-based resin. Thus, the scope of claim 5 is confusing because it is not clear how rosin-based resin can be required in claim 1 but be optional in claim 5, i.e. 0 wt.%. Clarification is requested.

Similar questions arise with respect to claims 9, 16, and 18 which each depend on claim 1 and which require the use of 0 wt.% alcohol solvent, 0 wt.% plasticizer, and 0 wt.% latex emulsion, respectively, while claim 1 requires the presence of alcohol solvent, plasticizer, and latex emulsion.

(c) Claim 17 recites that the thermoplastic latex emulsion is “modified” acrylics, “modified” methacrylics, etc. The scope of the claim is confusing because it is not clear what is meant by “modified” or what types of acrylics, methacrylics, etc. this encompasses.

(d) Claims 17 and 18, which each depend on claim 1, each recite the limitation “the thermoplastic latex emulsion” in line 1. There is insufficient antecedent basis for this limitation in the claim given that there is no disclosure of “thermoplastic latex emulsion” in claim 1. It is suggested that either “thermoplastic” is inserted before “latex emulsion” in claim 1 or “thermoplastic” is deleted from each of claims 17 and 18.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 5-13, and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi et al. (U.S. 6,699,312).

Hayashi et al. disclose ink comprising 3-10% pigment, 0.1-10% fatty acid ester, i.e. plasticizer, 1-20% rosin, 1-20% glycol, i.e. alcohol solvent, styrene-acrylic emulsion, and

polyethyleneimine, i.e. acid neutralizing agent (col.4, lines 35-36, col.4, line 56-col.5, line 11, col.5, lines 26 and 33-36, col.6, line 56-col.7, line 1, and col.7, lines 14-20 and 33).

While there is no disclosure that the ink is a water-washable lithographic composition as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim construction”. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner’s position that the preamble does not state any distinct definition of any of the claimed invention’s limitations and further that the purpose or intended use, i.e. water-washable lithographic composition, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art ink and further that the prior art structure which is ink identical to presently claimed water-washable lithographic composition is capable of performing the recited purpose or intended use.

In light of the above, it is clear that Hayashi et al. anticipate the present claims.

7. Claims 1, 3-6, 8-10, 12-13, 15-16, 18, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Krishnan et al. '022 (U.S. 6,444,022) taken in view of the evidence given in *Hawley's Condensed Chemical Dictionary*

Attention is drawn to example 2 of Krishnan et al. '022 that disclose lithographic composition comprising (i) 60% carbon black base comprising 40% carbon black, 20% rosin ester, and 3% monoethanol amine, (ii) 20% modified linseed oil comprising 27.94% polyethylene glycol and 16.2% phthalic anhydride, (iii) 25% latex, and (iv) 2% monoethanolamine. From this example, it is calculated that the ink comprises approximately 24% carbon black, 12% rosin ester, 3.8% monoethanolamine, 5.6% polyethylene glycol, 3.24% phthalic anhydride, and 25% latex. It is well known, as evidenced by *Hawley's Condensed Chemical Dictionary* (pages 878-879), that phthalic anhydride functions as a plasticizer. It is also disclosed that the rosin also includes maleic anhydride rosin or rosin salt. It is further disclosed that the ink is used in dry lithography (col.1, lines 5-6, col.3, lines 63-65, and col.4, lines 10 and 31-39). Given that Krishnan et al. '022 disclose composition identical to that presently claimed, it is clear that the composition would inherently be water-washable.

While there is no disclosure that the ink is a "wet" lithographic printing ink as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be

Art Unit: 1714

evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. "wet" lithographic printing ink, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art ink and further that the prior art structure which is ink identical to that presently claimed is capable of performing the recited purpose or intended use.

In light of the above, it is clear that Krishnan et al. '022 anticipate the present claims.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
10. Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashi et al. (U.S. 6,999,312) in view of Asada (U.S. 5,800,599).

The disclosure with respect to Hayashi et al. in paragraph 6 above is incorporated here by reference.

The difference between Hayashi et al. and the present claimed invention is the requirement in the claims of specific type of rosin.

Asada, which is drawn to inks, disclose the use of polymerized rosin and rosin modified phenol in order to prevent pigment present in the ink from becoming aggregated (col.2, lines 40-47).

In light of the motivation for using specific type of rosin disclosed by Asada as described above, it therefore would have been obvious to one of ordinary skill in the art to use such rosin

in the ink of Hayashi et al. in order to prevent pigment in the ink from aggregating, and thereby arrive at the claimed invention.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. (U.S. 6,444,022).

The disclosure with respect to Krishnan et al. '022 in paragraph 7 above is incorporated here by reference.

The difference between Krishnan et al. '022 and the present claimed invention is the requirement in the claim of the amount of rosin-based resin.

Krishnan et al. '022 disclose the use of 12% rosin-based resin, while the present claims require about 15% rosin-based resin.

It is apparent, however, that the instantly claimed amount of rosin-based resin and that taught by Krishnan et al. '022 are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of rosin-based resin disclosed by Krishnan et al. '022 and the amount disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in

the art that the amount of rosin-based resin disclosed in the present claims is but an obvious variant of the amount disclosed in Krishnan et al. '022, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. '022 (U.S. 6,444,022).

The disclosure with respect to Krishnan et al. '022 in paragraph 7 above is incorporated here by reference.

The difference between Krishnan et al. '022 and the present claimed invention is the requirement in the claim of the amount of acid neutralizing agent, i.e. monoethanolamine.

Krishnan et al. '022 disclose the use of 3.8% monoethanolamine, while the present claims require about 5% monoethanolamine.

It is apparent, however, that the instantly claimed amount of monoethanolamine and that taught by Krishnan et al. '022 are so close to each other that the fact pattern is similar to the one in *In re Woodruff*, 919 F.2d 1575, USPQ2d 1934 (Fed. Cir. 1990) or *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed.Cir. 1985) where despite a "slight" difference in the ranges the court held that such a difference did not "render the claims patentable" or, alternatively, that "a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough so that one skilled in the art would have expected them to have the same properties".

In light of the case law cited above and given that there is only a "slight" difference between the amount of monoethanolamine disclosed by Krishnan et al. '022 and the amount

Art Unit: 1714

disclosed in the present claims, it therefore would have been obvious to one of ordinary skill in the art that the amount of monoethanolamine disclosed in the present claims is but an obvious variant of the amount disclosed in Krishnan et al. '022, and thereby one of ordinary skill in the art would have arrived at the claimed invention.

13. Claims 1 and 3-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. '646 (U.S. 5,725,646) in view of Takayama et al. (U.S. 6,313,066).

Krishnan et al. '646 disclose lithographic ink comprising 0.5-10% rewetting agent, i.e. ethylene glycol or butyl carbitol, 2-30% pigment, amine such as monoethanolamine, 10-70% binder comprising 0-20% resin emulsion, i.e. latex obtained from (meth)acrylate and styrene, 10-70% rosin including rosin salt and maleated rosin ester, and 0-5% polyethylene imine. It is further disclosed that the ink is used in dry lithography. Attention is drawn to example 1 of Krishnan et al. '646 that discloses lithographic ink comprising 12% pigment, 5% latex, 2% monoethanolamine, 47% maleated rosin ester, and 2% polyethylene wax. It is well known as evidenced by Takayama et al. (col.9, lines 60-62) that polyethylene wax functions as plasticizer (col.1, lines 5-10, col.3, lines 15-40 and 46, col.3, line 55-col.4, line 12, and example 1). Given that Krishnan et al. '646 disclose composition identical to that presently claimed, it is clear that the composition would intrinsically be water-washable and suitable for use as wet lithographic printing ink.

While Krishnan et al. '646 fails to exemplify the presently claimed composition nor can the claimed composition be "clearly envisaged" from Krishnan et al. '646 as required to meet the standard of anticipation (cf. MPEP 2131.03), nevertheless, in light of the overlap between the

claimed composition and the composition disclosed by Krishnan et al. '646, absent a showing of criticality for the presently claimed composition, it is urged that it would have been within the bounds of routine experimentation, as well as the skill level of one of ordinary skill in the art, to use composition which is both disclosed by Krishnan et al. '646 and encompassed within the scope of the present claims and thereby arrive at the claimed invention.

14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. '646 in view of Takayama et al. as applied to claims 1 and 3-20 above, and further in view of Pennaz (U.S. 5,338,351).

The difference between Krishnan et al. '646 and the present claimed invention is the requirement in the present claims of acid number of the rosin-based resin.

Pennaz, which is drawn to inks, disclose the use of rosin possessing acid number of 25-200 and further disclose that the water-solubility or water-reducible properties of the rosin are controlled by its acid number (col.9, line 57-col.10, line 9)

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use rosin possessing acid number of 25 to 200 in Krishnan et al. '646 in order to produce rosin with desired water solubility, and thereby arrive at the claimed invention.

15. Claims 1, 5-6, 8-10, 12, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Incontro et al. (U.S. 4,973,617) in view of Navi (U.S. 4,445,433).

Incontro et al. disclose ink obtained from 50% varnish comprising 56% latex such as acrylic latex, 20% propanol, and 20% rosin-modified polyamide and 50% ink comprising 1%

amine and 36% pigment. Thus, it is calculated that the ink comprises 28% latex, 10% propanol, 0.5% amine, 18% pigment, and 10% rosin-modified polyamide. It is further disclosed that the ink contains plasticizer. Given that Incontro et al. disclose composition comprising latex, alcohol solvent, amine, pigment, rosin-based resin, and plasticizer as presently claimed, it is clear that the composition is intrinsically water-washable (col.1, lines 8-9, 40-58, and 64-66, col.2, lines 13-22 and example 2). Attention is drawn to col.4, lines 25-31 of Incontro et al. which disclose that the ink is printed using anilox roll which is well known, as evidenced by Navi (abstract), to be part of a lithographic press. Thus, it is clear that the ink of Incontro et al. is a lithographic ink and thus, intrinsically suitable as wet lithographic ink and dry lithographic ink.

While Incontro et al. fails to exemplify the presently claimed composition nor can the claimed composition be “clearly envisaged” from Incontro et al. as required to meet the standard of anticipation (cf. MPEP 2131.03), nevertheless, in light of the overlap between the claimed composition and the composition disclosed by Incontro et al., absent a showing of criticality for the presently claimed composition, it is urged that it would have been within the bounds of routine experimentation, as well as the skill level of one of ordinary skill in the art, to use composition which is both disclosed by Incontro et al. and encompassed within the scope of the present claims and thereby arrive at the claimed invention.

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Incontro et al. in view of Navi as applied to claims 1, 5-6, 8-10, 12, and 16-20 above, and further in view of Pugliese et al. (U.S. 3,412,053).

The difference between Incontro et al. in view of Navi and the present claimed invention is the requirement in the claims of specific type of amine.

Pugliese et al., which is drawn to the use of printing inks, disclose the use of amine such as diethanolamine or triethanolamine in order to control the drying time and stability of the ink (col.4, lines 42-59).

In light of the motivation for using specific type of amine disclosed by Pugliese et al. as described above, it therefore would have been obvious to one of ordinary skill in the art to use such amine in the ink of Incontro et al. in order to produce ink with good dry time and stability, and thereby arrive at the claimed invention.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

WO 99/27022 discloses ink comprising resin rosin, resin emulsion, amine, and pigment, however, there is no disclosure of alcohol solvent as presently claimed.

WO 01/90263 discloses water-washable ink comprising rosin, latex, pigment, and amine, however, there is no disclosure of alcohol solvent or plasticizer as presently claimed.


WO 03/042308 discloses ink comprising rosin-based resin, pigment, acid neutralizing agent, plasticizer, and latex, however, there is no disclosure of alcohol solvent as presently claimed.

Art Unit: 1714

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
2/3/06